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(54) Title: SANITARY NUTRITIOUS DRINK FOR DOGS

(57) Abstract: This application for an Invention Patent refers to a drink for dogs which, in addition to being a food supplement has a sanitary nature which breaks the biologic chain that contributes to the proliferation of various diseases produced by different larvae and particularly yellow fever and Dengue and its transmission vector, the *Aedes aegypty* mosquito. The invention also provides the same substance in powder form and also provides the processes for their preparation.



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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

No Clares	(O 7 miles 10 and 7 miles 40 and 447)	·-				
Applicant's or agent's file reference P02138/PCT		of Transmittal of International Search Report 220) as well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/EP 03/03768 11/04/2003 11/04/2002						
Applicant						
TREDIN S.A.						
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Aut Insmitted to the International Bureau.	nority and is transmitted to the applicant				
This International Search Report consists X It is also accompanied by	of a total of4 sheets. a copy of each prior art document cited in this	report.				
Basis of the report						
With regard to the language, the is language in which it was filed, unle	nternational search was carried out on the basess otherwise indicated under this item.	sis of the international application in the				
the international search wa Authority (Rule 23.1(b)).	as carried out on the basis of a translation of the	ne international application furnished to this				
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the statement that the sub- international application as	sequently furnished written sequence listing do filed has been furnished.	pes not go beyond the disclosure in the				
the statement that the infor furnished	mation recorded in computer readable form is	identical to the written sequence listing has been				
2. Certain claims were foun	d unsearchable (See Box I).					
3. Unity of invention is lack	ing (see Box II).					
4. With regard to the title,						
the text is approved as sub	mitted by the applicant.					
the text has been established by this Authority to read as follows:						
SANITARY NUTRITIOUS DRI	INK FOR DOGS					
	INTERNATIONA	LER RECHERCHENBERICHT				
5. With regard to the abstract,						
the text is approved as sub	mitted by the applicant. ed, according to Rule 38.2(b), by this Authority date of mailing of this international search repo	as it appears in Box III. The applicant may, ort, submit comments to this Authority.				
6. The figure of the drawings to be publis	hed with the abstract is Figure No.					
as suggested by the application	ant.	X None of the figures.				
because the applicant failed	d to suggest a figure.					
because this figure better c	haracterizes the invention.					

Form PCT/ISA/210 (first sheet) (July 1998)

SANITARY NUTRITIOUS DRINK FOR DOGS

The present invention refers to a drink for dogs which, in addition to being nutritious has a sanitary nature in that it breaks the biologic chain which contributes to the proliferation of various diseases produced by different larvae and particularly yellow fever and dengue and its transmission vector, the mosquito "Aedes aegypty".

The particular problem posed is the reproduction of mosquitoes and black flies in domestic animal troughs.

The food components have the purpose of providing pets with substances fundamental for their metabolism and general health.

In addition the drink includes flavoring to ensure its acceptance by dogs, as well as preservers or stabilizers to allow for reasonable periods of stagnation. To the aforesaid sanitary effects, the drink includes a non-toxic larvicide, all of these in adequate proportions and concentrations, using drinking water or a substitute acceptable for veterinary consumption and dechlorinated. In case the water used as solvent includes an excess of one substance or other, for example minerals, the water shall be previously treated.

In case of using drinking or softened water, the elements constituting the drink shall be added to those

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presented by the solvent. All the components of the drink for which protection is sought are detailed hereunder with the respective percentages and concentrations for one liter of solvent, including, in addition to the aforesaid components others the purpose of which in the drink are specified therein.

Vitamins and Minerals

Folic Acid	$7.5 \times 10^3 \text{ mcg}$	± 20 %
Phosphoric Acid 85%	10 mg	± 10 %
Biotine	1.5 x 10 ³ mcg	± 20 %
Calcium Carbonate	10 mg	± 10 %
Magnesium Carbonate	20 mg	± 20 %
Potassium Chloride	15 mg	± 10 %
Sodium Chloride	15 x 10 ³ mg	± 20 %
Cobalt	$0.25 \times 10^3 \text{ mg}$	± 20 %
Copper	1 x 10 ³ mg	± 20 %
Coline	8 x 10 ³ mg	± 20 %
D-Panthenol	1×10^3 mg	± 20 %
Iron	5 x 10 ³ mg	± 20 %
Potassium Iodate	0.1×10^3 mg	± 20.%
Manganese	$0.75 \times 10^3 \text{ mg}$	± 20 %
Nicotinamide	3×10^3 mg	± 20 %
Sodium Selenite	15 x 10 ³ mcg	± 20 %
Vitamin A	0.45 UI	± 10 %
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Vitamin B1	2.5 x 10 ³ mg	± 20 %
Vitamin B12	2.5 x 10 ³ mcg	± 20 %
Vitamin B2	1.5 x 10 ³ mg	± 20 %
Vitamin B6	1 x 10 ³ mg	± 20 %
Vitamin C	25 mg	± 10 %
Vitamin D3	0.1 UI	± 20 %
Vitamin E	2 x 10 ³ mg	± 20 %
Vitamin K3	4.5 x 10 ³ mg	± 20 %
Zinc	2 x 10 ³ mg	± 20 %
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Preservers for the stabilization of the product

12.5 to 50 mg
12.5 to 50 mg
12.5 to 50 mg
300 to 750 mg
250 mg to 1 gr

These preservers may be used in combination, with exclusion of some of them, according to the environmental conditions of the place of application.

Amino acids

Lisine	$1.5 \times 10^3 \text{ mg}$	± 20 %
Methionine	5 x 10 ³ mg	± 20 %

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Sweeteners

Glycerin and/or Sorbitol	100 to 200 mg
Glucose and/or Fructose	2.25 to 10 gr

Permitted Coloring Agents

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Flavoring Agents

Apple, banana, kiwi, cherry, orange, lemon, grapefruit, cola, pineapple, carrot, vanilla, almond, cacao and cream

Biologic Larvicide

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VETOBAC-AS ® A	obott 7.5	to 15	x 10 ³ cc	± 15 %
Laboratories	or			
similar				
				•

Buffer

Citric/Citrate	Cs 4 <ph>6.5</ph>

15 Solvent (1 liter)

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Drinking softened deionized Water

The drink may be presented in liquid form for direct consumption or in powder for preparing it by adding the appropriate quantity of water.

The preparation of the liquid form consists in estimating the quantity of solvent (water) in accordance with the quantity of drink to be prepared and afterwards adding all the components either directly or previously diluted.

To prepare the powder, the component products are mixed and they dried by known methods, for example at low temperature by dehydratation or equivalent methods.

Object

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As it may be appreciated the canine drink is formulated to supplement especially dry food currently in commerce, therefore the vitamin and mineral levels have been adjusted to avoid overdose when added to the levels existing in dry food.

Small doses of glucose contribute a little but quick 20 source of energy.

The level of sodium chloride has been reduced to the minimum. The formula incorporates a biologic larvicide, non toxic either for humans or animals. This larvicide

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prevents the reproduction of mosquitoes and black flies in troughs' water.

Differences with other formulas

This formula is characterized by small doses of minerals and vitamins which, added to those in dry food, do not cause intolerance in the animal organism.

The preservers doses have been balanced to maintain the level of *Bacillus thuringiensis* active and stable supported by microbiological tests, during 90 days, at least.

Problems that are solved

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On the other hand, due to the preservers added to this novel drink, more stability of the formula is obtained, allowing consumers to maintain it in animal troughs for more time. At the same time, as *Bacillus thuringiensis* is included, the possibilities for Dengue and yellow fever to develop are inhibited.

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CLAIMS

 A drink for dogs having nutritious and sanitary nature and comprising in one liter of drinkable dechlorinated and deionized solvent the following components,

-vitamins and minerals, whose expressed quantities can vary in the range of ± 20 %: Folic Acid 7.5 x 10³ mcg, Biotine 1.5 x 10³ mcg, Magnesium Carbonate 20 mg, Sodium Chloride 15 x 10³ mg, Cobalt 0.25 x 10³ mg, Copper 1 x 10³ mg, Coline 8 x 10³ mg, D-Panthenol 1 x 10³, Iron 5 x 10³ mg, Potassium Iodate 0.1 x 10³ mg, Manganese 0.75 x 10³ mg, Nicotinamide 3 x 10³ mg, Sodium Selenite 15 x 10³ mcg, Vitamin B1 2.5 x 10³ mg, Vitamin B12 2.5 x 10³ mcg, Vitamin B2 1.5 x 10³ mg, Vitamin B6 1 x 10³ mg, Vitamin D3 0.1 UI, Vitamin E 2 x 10³ mg, Vitamin K3 4.5 x 10³ mg, Zinc 2 x 10³ mg,

-vitamins and minerals, whose expressed quantities can vary in the range of \pm 10 %: Phosphoric Acid 85% 10 mg, Calcium Carbonate 10 mg, Potassium Chloride 15mg, Vitamin

20 A 0.45 UI, Vitamin C 25 mg;

-preservers for the stabilization of the product: Nipagin 12.5 to 50 mg, Nipasol 12.5 to 50 mg, 1,2 Benzisothiazoline 12.5 to 50 mg, Sorbic/Sorbate Buffer 300 to 750 mg, Sodium Benzoate 250 mg to 1 gr, in which these preservers may be used in combination, with

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exclusion of some of them, according to the environmental conditions of the place of application;

- amino acids, whose expressed quantities can vary in the range of \pm 20 %: Lisine 1.5 x 10^3 mg, Methionine 5 x 10^3
- -sweeteners: Glycerin and/or Sorbitol 100 to 200 mg,
 Glucose and/or Fructose 2.25 to 10 gr;
 - -permitted Coloring Agents;

almond, cacao and cream;

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mg;

- -flavoring Agents: Apple, banana, kiwi, cherry, orange,
 10 lemon, grapefruit, cola, pineapple, carrot, vanilla,
 - -biologic larvicide, whose expressed quantity can varies in the range of \pm 10 %: VETOBAC-AS® Abbott Laboratories or similar 7.5 to 15 x 10^3 cc; and
- 15 -buffer: Citric/Citrate Cs 4<pH<6.5.
 - 2. A drink according to claim 1, wherein the solvent is drinking water or a similar substitute acceptable for veterinary consumption and previously dechlorinated.
- 3. A drink according to the claim 1 or 2, wherein if the water used as solvent includes some substance in excess, like some mineral or other, the water is previously treated.
- 4. A powder preparation comprising all the components according to claim 1 excepting the solvent.

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5. A process for the preparation of a drink according to claims 1 to 3, wherein the quantity of solvent is estimated in accordance with the quantity of drink to be prepared and then adding to said quantity of solvent all the components either directly or previously and partially diluted.

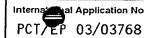
- 6. A process for the preparation the product referred to in claims 1 to 4 to be provided in powder form wherein the component products are mixed and the mixture is then dried by known methods, for example at low temperature by dehydratation or equivalent methods.
- 7. A product for dog consumption according to any of the preceding claims which can be provided in liquid form bottled in disposable or non disposable containers or in powder form packed in dry containers.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A23K1/18 A23K1/16 A23K1/175 A01N63/00 A23K1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23K A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

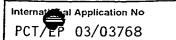
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Date of the actual completion of the international search	Date of mailing of the international search report	
15 July 2003	30/07/2003	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Smeets, D	
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